

## Anderson County

### Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/8/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 21 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Anderson County economy.<sup>1</sup>

These 21 sectors have a total direct output of approximately **\$110.8 million** and support **698 jobs** in Anderson County. Running the model for all 21 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Anderson County Economy						
Impact Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>	Output % of Gross Regional Product
Direct Effect	697.5	17.62%	\$32,972,628	13.92%	\$110,834,399	46.81%
Indirect Effect	119.4	3.02%	\$7,584,833	3.20%	\$14,753,501	6.23%
Induced Effect	121.2	3.06%	\$7,430,865	3.14%	\$13,789,876	5.82%
Total Effect	938.1	23.70%	\$47,988,326	20.27%	\$139,377,777	58.86%

As shown in the above table, agriculture, food, and food processing sectors support **938 jobs**, or **23.70%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$139.4 million**, roughly **58.86% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 21 agriculture, food, and food processing sectors is approximately **\$48.0 million**, or **20.27% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **20.27% of the total economy**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting:

[http://www.implan.com/index.php?option=com\\_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70](http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70)

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **368 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Anderson County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	367.5	\$35,319,429
Animal production, except cattle and poultry and eggs	150.3	\$16,528,857
Grain farming	52.4	\$16,127,161
All other crop farming	42.2	\$2,703,503
Oilseed farming	34.0	\$29,847,136
Support activities for agriculture and forestry	27.2	\$1,269,850
Wholesale trade	19.9	\$4,400,528
Truck transportation	16.1	\$2,488,417
Hospitals	16.1	\$2,244,877
Real estate	13.6	\$936,969

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately **\$35.3 million** to the Anderson County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	367.5	\$35,319,429
Oilseed farming	34.0	\$29,847,136
Animal production, except cattle and poultry and eggs	150.3	\$16,528,857
Grain farming	52.4	\$16,127,161
Wholesale trade	19.9	\$4,400,528
Owner-occupied dwellings	0.0	\$3,234,557
All other crop farming	42.2	\$2,703,503
Truck transportation	16.1	\$2,488,417
Dairy cattle and milk production	5.0	\$2,487,828
Monetary authorities and depository credit intermediation	13.2	\$2,285,319

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Anderson County economy.

<b>All Agriculture, Food, and Food Processing Sectors</b>		
<b>Sector</b>	<b>Total Employment</b>	<b>Total Output</b>
Oilseed farming	34.0	\$29,847,136.04
Grain farming	52.4	\$16,127,161.29
Vegetable and melon farming	1.8	\$441,884.94
Fruit farming	0.4	\$46,308.30
Tree nut farming	0.0	\$54.34
Greenhouse, nursery, and floriculture production	3.7	\$709,926.50
All other crop farming	42.2	\$2,703,503.18
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	367.5	\$35,319,429.13
Dairy cattle and milk production	5.0	\$2,487,828.37
Poultry and egg production	1.5	\$1,368,168.89
Animal production, except cattle and poultry and eggs	150.3	\$16,528,857.04
Commercial logging	1.7	\$73,013.79
Commercial hunting and trapping	3.4	\$68,531.84
Poultry processing	2.7	\$724,934.05
Bread and bakery product, except frozen, manufacturing	7.1	\$797,159.43
Frozen cakes and other pastries manufacturing	0.3	\$37,384.31
Breweries	0.8	\$404,442.47
Sawmills	3.3	\$724,922.38
Farm machinery and equipment manufacturing	3.8	\$1,543,349.35
Veterinary services	6.4	\$557,608.81
Landscape and horticultural services	9.3	\$322,794.92

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Anderson County, the retail sector was omitted.